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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,852	06/27/2001	John T. Chapman	CISCP233	3676
22434	7590	10/04/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP			TRAN, PHUC H	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2666	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/894,852	Applicant(s) CHAPMAN, JOHN T.	
	Examiner PHUC H. TRAN	Art Unit 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/14/02, 5/6/02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-57 objected to because of the following informalities: acronym "MAP, DOCSIS" is needed to rewrite in full text. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-57 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding to claims 1-57, the "MAP message" is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art, at the time the application was filed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

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has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Rakib et al. (U.S. Patent No. 6857132 B1).

* Because of no description of "MAP message", therefore Examiner will consider as a message.

- With respect to claims 1, 12, 22, 33, 40, & 51, Rakib teaches a method for forwarding channel messages to selected channels in an access network, the access network including a plurality of upstream and downstream channels for providing communication between network nodes and a Head End of the access network, the Head End including at least one interface for accessing the upstream and downstream channels (e.g. the system for providing video-on-demand service), the method comprising:

identifying a first channel message associated with a first upstream channel (e.g. blocks 346, 348, 350 in Fig. 5A);

identifying at least one downstream channel on which the first channel message is to be transmitted, wherein each identified downstream channel is associated with a respective interface (blocks 352, 354, 356 in Fig. 5A); and

forwarding a copy of the first channel message to each of the interfaces associated with each of the identified downstream channels (e.g. col. 3, lines 22-35).

- With respect to claims 2, 13, 23, 34, 41, & 52, Rakib further teaches forwarding a copy of the first channel message only to each of the interfaces associated with each of the identified downstream channels, wherein each of the identified downstream channels communicates with at least one respective network node configured to communicate with the Head End via the first upstream channel (e.g. the message for each of downstream modulator and to the cable modem as Fig. 1, col. 18, lines 24-30).

- With respect to claims 3, 20, 24, & 42, Rakib further comprises transmitting the first channel messages only on the identified downstream channels, wherein each of the identified downstream channels communicates with at least one respective network node configured to communicate with the Head End via the first upstream channel (col. 9, lines 49-55).

- With respect to claims 4, 14, 25, 35, 43, & 53 Rakib teaches wherein each interface corresponds to a respective port on a respective line card (e.g. Fig. 4).

- With respect to claims 5, 15, 26, 36, 44, & 54, Rakib teaches forwarding a first copy of the first channel message to a first line card associated with a first identified downstream channel (e.g. request of video stream to home #1 in Fig. 1); and forwarding a second copy of the first channel message to a second line card associated with a second identified downstream channel (request of IP packets to home #2 in Fig. 1); the first line card being different than the second line card (214 and 216 in Fig. 2).

- With respect to claims 6, 16, 27, 37, 45, & 55, Rakib teaches wherein said at least one downstream channel identifying includes selecting a particular downstream channel as an

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identified downstream channel in response to a determination that the particular downstream channel is used to communicate with at least one network node which is configured to use the first upstream channel to communicate with the Head End (col. 18, lines 29-32).

- With respect to claims 7, 17, 28, 38, 46, & 56, Rakib teaches wherein the identified at least one downstream channel includes only selected downstream channels, which are used to communicate with network nodes configured to use the first upstream channel to communicate with the Head End (col. 9, lines 49-55; blocks 346, 348, 350 in Fig. 5A).

- With respect to claims 8, 10, 29, 31, 47 & 49, Rakib teaches storing membership information at the Head End, the membership information relating to specific upstream and downstream channels being used by selected network nodes to communicate with the Head End (e.g. 23 in Fig. 4).

- With respect to claims 9, 30, & 48, Rakib teaches wherein the membership information includes: a first portion of information for identifying a particular network node; a second portion of information for identifying an upstream channel used by the network node; and a third portion of information for identifying a downstream channel used by the network node (e.g. Fig. 5A).

- With respect to claims 11, 18, 21, 32, 39, 50, & 57, Rakib teaches wherein said access network is a cable network implemented in accordance with a DOCSIS standardized protocol, and wherein said network nodes are cable modems (e.g. Fig. 1 and col. 23, line 67).

- With respect to claim 19, Rakib teaches in a access network having at least one downstream load sharing group of downstream channels and at least one upstream load sharing group of upstream channels (e.g. Fig. 1 shows numbers of user sharing the upstream and

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downstream channel), a method for performing channel message forwarding comprising forwarding a selected channel message associated with a particular upstream channel to selected downstream channels in the downstream load sharing group (col. 18, lines 24-30).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Liva et al. (U.S. Pub. 0136203A1) discloses enhanced fiber nodes with CMTS capability.

- Grimwood et al. (U.S. Patent No. 6459703 B1) discloses mixed DOCSIS 1.0 TDMA bursts with SCDMA transmissions on the same frequency channel.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
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Art Unit 2664

P.t
9/27/05



DANG TON
PRIMARY EXAMINER